SITES RESERVOIR PROJECT INFORMATION

SUMMARY:
In 2019, the Santa Clara Valley Water District's (Valley Water) Board of Directors (Board) authorized the Chief Executive Officer (CEO) to execute an agreement and subsequent first amendment to participate in Phase 2 of the Sites Reservoir Project (Sites Project) (Attachment 7). That agreement expired on June 30, 2020. The Sites Project Authority (Sites JPA), a joint powers authority, is offering Valley Water the opportunity to continue participating in the Sites Project by executing the Second amendment to the 2019 Reservoir Project Agreement (Sites A2) (Attachment 7). Staff recommendation to the Board is to authorize the CEO to execute the Sites A2 for a participation level of 0.2 percent of the total project and a funding commitment of up to $50,000. Updates and report on Sites Project, including the participation options described below, were provided by staff to the Board Water Storage Exploratory Committee (Committee) in July, August, and October 2020.

To date, all of existing project agreement member participants except Valley Water have agreed to continue participation in the project. Attachment 9 lists the existing participants and their requested yields as well as two new potential participants. The Sites JPA requests a decision on project participation from Valley Water by November 2020.

<u>Second Amendment to 2019 Project Agreement</u>
Execution of the agreement would obligate Valley Water to provide funding for continued Phase 2 work activities from June 2020 through December 2021 (Phase 2, Years 2 and 3), provide Valley Water with a continuing seat on the Sites Project Reservoir Committee (Reservoir Committee) through December 2021, and give Valley Water priority access to proportional water supply and storage benefits provided by the project. The total Phase 2 Years 2 and 3 budget is roughly $40 million, of which about $19 million is to be funded by water user participants that comprise the Reservoir Committee. The remaining budget is expected to be funded using Prop 1 WSIP early funding and funds secured from provisions under the WIIN Act.

Funding for Sites A2 will go towards making progress on completion and release of draft EIR/EIS documents for public comment, development of guidelines for coordinated operations of the Sites Project with the State Water Project (SWP) and Central Valley Project (CVP), permits, feasibility design, evaluation of water rights issues, and further development of Sites Project policies and governance. The next two years of Phase 2 will also be critical in satisfying requirements to secure funding from the Proposition 1 Water Storage Investment Program (Prop 1 WSIP).

Sites A2 allows members to withdraw from the agreement with at least 30 days written notice. A withdrawing member would still be responsible for paying costs approved prior to the date of written notice of withdrawal. Should Valley Water reduce or withdraw its participation, it may be possible to rejoin in the future if there is unsubscribed participation in the Project; however, reinstating first priority rights to the project benefits would be subject to approval of the Sites Reservoir Committee.

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Background

The Sites Project is a proposed off-stream reservoir that would be located north-of-Delta (NOD), approximately 10 miles west of the town of Maxwell in Colusa County. Sites may provide Valley Water new storage, new Delta-conveyed water supplies, improved CVP and SWP reliability, and increased operational flexibility. Since 2016, Valley Water and nine other water agencies that contract for SWP supplies have coordinated with the Sites JPA, a joint powers authority which is comprised of CVP contractors north of the Delta, to move the project forward. The new reservoir would collect winter flood flows from the Sacramento River with the objective of increasing water supply certainty while ensuring in-stream flows that benefit the Delta ecosystem. The Sites Project managers anticipate that the Sites Project will be cooperatively managed in conjunction with both the SWP and CVP and will increase the reliability of statewide water supplies in drier years for environmental, agricultural, and urban uses.

The Sites Project is envisioned to progress in a five-phase approach:

- Phase 1 - Prop 1 WSIP funding application and EIR/EIS development. Completed in 2018;
- Phase 2 - EIR/EIS completion, predesign, critical permits, and water rights. In progress;
- Phase 3 - Final design, land and right of way acquisition, and remaining permits. Future 2022 to 2025;
- Phase 4 – Construction. Future 2025-2029; and
- Phase 5 - Transfer to Operations

The first year of Phase 2 has ended and additional funding is needed to continue development of the project. Accomplishments of the Sites Project Phase 2 Year 1 (2019) work include:

- Securing an additional $6 million in Congressional appropriations from the Water Infrastructure Improvements for the Nation (WIIN) Act, bringing total to $10 million;
- Adoption of a Sites Storage Policy which better defines storage benefit to project participants and outlines rules of use;
- Refinement of project description and reduction in cost and size; and
- Recognition in in the Governor’s 2020 Water Resilience Portfolio - a plan to provide reliability and resiliency to statewide water supplies.

In April 2020, the cost of the Sites Project was reduced from roughly $6 billion to roughly $3 billion by reducing the size of the reservoir from 1.8 million acre-foot (MAF) to 1.5 MAF and refining project elements. Reducing the size of the reservoir was responsive to input from project participants, state and federal agencies, non-government organizations, elected officials, landowners and local communities.

Potential Valley Water Benefits

The Sites Project can provide both water supply yield as well as new storage. The reservoir is anticipated to also provide storage capacity for other supplies secured by

participants. Staff anticipates the Sites Project could provide the following benefits to Valley Water, if it is able to divert and store water as proposed with operations integrated with the SWP and CVP:

- An increase in water supply, including significant amounts in dry years;
- Storage rights in Sites reservoir proportional to the Valley Water's targeted participation level; and
- Improvement in Shasta Reservoir storage levels and cold-water pool that may provide fishery benefits and help stabilize CVP water supply allocations.

The Sites Project has been identified in Valley Water's Water Supply Master Plan (WSMP) as a potential alternative to help ensure reliability of its Delta-conveyed supplies. In addition, the availability of new dry year supplies produced by Sites Project can expand opportunities for water transfers and exchanges and possibly provide greater exchange capabilities to support Valley Water's groundwater banking withdrawals in dry years.

As with any large infrastructure project in California, the extent to which these benefits can be realized depends on how the project risks, challenges, and mitigation measures are addressed throughout project development. Preliminary water storage benefits are estimated in Table 1 below. A summary of the Sites Project major project risks, challenges, and mitigation measures is provided in Attachment 10. If Valley Water were to ultimately invest in the Sites Project, these risks could be reduced by also investing in conveyance improvement projects such as the Delta Conveyance Facility or the Transfer Bethany Pipeline (part of the Los Vaqueros Expansion Project).

Project Governance

The Sites Project is governed by the Sites JPA and a Reservoir Committee, whose authority is delegated by the Sites JPA. Valley Water board members have expressed an interest in developing opportunities to join the Sites JPA in order to better manage Valley Water's investment in the project, while some Sites JPA members have expressed a desire to maintain local control of the Sites Project. In a letter, dated August 11, 2020, the Sites JPA recognizes Valley Water's concerns and interest in a greater level of policy oversight by participants outside of the Sacramento Valley and provides assurance that this issue will be discussed by the Sites JPA Board and Reservoir Committee during the Sites A2 phase of work (Attachment 11).

Recommended Participation Level

The Sites JPA has not set a minimum participation level for the project. As shown in Table 1 below, the Board approved a requested yield of 16,000 acre-foot (AF) from the Sites Project in February of 2019, which corresponds to a 3.2 percent participation level in the original $6 billion project. Since that time, the project has been downsized from 1.8 to 1.5 MAF of storage, with a capital cost reduction from $6 billion to $3 billion. Staff evaluated several options for continued participation:

- *Option 1 – Reduce but maintain significant benefits ($780,000 funding commitment)*: This option reduces Valley Water's requested yield from 16,000 AF to 7,800 AF while maintaining a 3.2 percent overall participation level in

the downsized project for a cost of $780,000;

- *Option 2 – Reduce participation by half ($400,000 funding commitment):* This option reduces Valley Water's participation in the total project from 3.2% to 1.6%. This corresponds to a requested yield of 4,000 AF;
- *Option 3 – Reduce to a minimal participation level ($50,000 funding commitment)*: This option reduces Valley Water's requested yield to 500 AF, a level that does not provide significant benefits but that can maintain Valley Water's participation in the Reservoir Committee, the governing body under the Sites JPA that is developing the project. This corresponds to a participation level in the total project of 0.2 percent for a cost of $50,000; and
- *Option 4 – Withdraw from the project (No funding commitment):* Under this option, Valley Water would withdraw completely from the project at no additional cost and the Reservoir Committee.

The funding commitments associated with the various options correlate to $100 dollars in funding per each incremental 1 AF in participation request, payable in two payments, with $60 dollars per AF due in November 2020 and up to $40 per AF due in April 2021.

Staff's analysis indicates that the Sites Project may potentially provide significant quantities of additional water supply, storage, and operational flexibility. However, the current suite of water supply investments prioritized in the WSMP, when coupled with the reduced demand forecast presented in the Monitoring and Assessment Program (MAP) 2020 report, are more than sufficient to meet Valley Water's level of service goals for 2040. In addition, the WSMP considers the Sites Project to serve as an alternative to the Delta Conveyance Project if the Delta Conveyance Project does not ultimately move forward. Given this information and a recognition of current economic considerations and limited Valley Water funds, staff is recommending a significantly reduced participation level corresponding to Option 3. Staff recommends sustaining a minimal participation level and staying in the project rather than completely withdrawing for the following reasons:

- Several water supply investments prioritized in the WSMP are currently under development, and anticipated benefits may not be fully realized;
- Staff's analysis of the long term impacts from climate change have not yet been completed;
- Valley Water may want to consider increasing participation at the end of 2021 if supported by new information and there is available capacity; and
- Continued participation will allow staff to continue to evaluate the project in the event increased participation is justified.

Note the yield amounts in Table 1 represent new water supplies not otherwise available to Valley Water, for example, through other projects currently being considered. Ultimately the amount of project yield and benefit that is usable by Valley Water depends on the portfolio of water supply projects Valley Water ultimately implements as guided by the WSMP; the outcome of negotiations among water agency participants, Department of Water Resources, and U.S. Bureau of Reclamation (USBR); the outcome of ongoing regulatory processes; and refinements of Sites Project operations

to reflect storage benefits and updated operational constraints.
Additional modeling refinements are currently being implemented to better estimate potential yields and benefits.

Past Sites Project Funding

Through September 2020, Valley Water has spent approximately $1.88 million towards Sites Project cost-sharing for the Prop 1 WSIP application and project development. The California Water Commission approved a Prop 1 WSIP grant award of up to $816 million for Sites Project, including $40.8 million in early funding. The USBR received a total of $10 million of federal funding for Sites Project through the Water Infrastructure Improvements for the Nation Act (WIIN Act). The U.S. Department of Agriculture approved a $449 million loan for the Sites Project's Maxwell water intertie conveyance facilities. Sites Project and project partners are continuing efforts to procure additional funding beyond 2021.

The Sites JPA has adopted a credit reimbursement policy that provides for reimbursement to participants that reduce their participation level or withdraw from the project prior to Phase 3, provided that (1) the withdrawal is offset by additional funding provided by others, and (2) such reimbursement does not have an adverse impact on the financial viability or overall implementation of the project. Depending upon overall funding and support for the project, the policy may allow for partial or full reimbursement of Valley Water's past payments if Valley Water reduces or withdraws participation. If funding for the project is inadequate, Valley Water would not be reimbursed.

Table 1: Comparison of Participation Options

	Last Board Decision (February 26, 2019)	Option 1	Option 2	Option 3	Option 4
		Maintain Participation	Reduce Participation by Half	Reduced Participation	Withdraw from Participation
PROJECT DESCRIPTION					
Total Capital Cost (2019 Dollars)[1]	$6 Billion	$3 Billion	$3 Billion	$3 Billion	$3 Billion
Reservoir Size (MAF)	1.8	1.5	1.5	1.5	1.5
Total Estimated Project Annual Yield (AF)	500,000	240,000	240,000	240,000	240,000
PARTICIPATION SIZE					
Valley Water Share of Total Project Cost and Benefit	3.20%	3.20%	1.60%	0.20%	0.00%
Valley Water Participation Request (AF)[2]	16,000	7,800	4,000	500	0

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PRELIMINARY ESTIMATED BENEFITS (STORAGE AND YIELD)					
Valley Water Average Delivered Yield (AF)[3]	11,100	4,700 to 6,100	2,400 to 3,100	300 to 400	0
Valley Water Average Dry/Critical (Drier) Year Delivered Yield (AF)[3]	21,500	6,500 to 8,200	3,300 to 4,200	400 to 500	0
Valley Water Storage Share (AF)	55,000	45,000	23,000	2,800	0
FUNDING					
Valley Water Share of Total Capital Cost (2019 Dollars)	$192 Million	$97 Million	$50 Million	$6 Million	$0 Million
Valley Water Share of Total Capital Cost (Fully Inflated Dollars) [4]	$242 Million	$125 Million	$64 Million	$8 Million	$0 Million
PV Lifecycle Unit Cost[5]	Not Available	$1,100/AF - $1,400/AF	$1,100/AF - $1,400/AF	$1,100/AF - $1,400/AF	Not Applicable
Valley Water Funding Commitment	**$0.96 Million**	**$0.78 Million**	**$0.40 Million**	**$0.05 Million**	**$0.00 Million**

[1] Capital cost were reported in 2015 dollars at the February 26, 2019 Board meeting and are escalated to 2019 dollars in this report. The previously reported 2015 dollar values were $5.5 billion for the total project and $177 million for Valley Water's 3.2% share of a 1.8 MAF reservoir project.

[2] Value requested and used by Sites Project managers to calculate participation levels relative to other participants. Actual annual yield of the project will differ from participation level.

[3] Delivered yields assume a 25% carriage water loss.

[4] Total Capital Cost published by the Sites Project were fully inflated by Valley Water financial staff to determine estimated construction costs.

[5] PV lifecycle unit cost is calculated using the Valley Water 100-year life cycle cost and the life cycle usable project supplies. Usable project supplies is the portion of the preliminary estimated delivered yield that can be used by Valley Water to meet demands.